

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on July 17, 2006, is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahito et al., Patent Abstracts of Japan No. 2002-341781.

4. With regard to claim 1, in figures 1, 3 and 5, Masahito discloses a method for producing a display front panel comprising a transparent substrate (13), a metal mesh layer (11) laminated to at least one surface of the transparent substrate (13) by a first transparent adhesive layer (14), and a near infrared ray shielding film (5) laminated to the surface of the metal mesh layer (11) by a second transparent adhesive layer (4B), comprising the steps of: (1) laminating a metal layer (11) to at least one surface of a transparent substrate (13) by a first transparent adhesive layer (14), thereby obtaining a laminate, (2) providing a mesh-patterned resist layer on the metal layer (11) face of the laminate, etching the metal layer (11) to remove portions thereof that are not covered with the resist layer, and removing the resist layer, thereby forming a metal mesh layer

(11) having a mesh part with a plurality of openings (M, figure 5), and a frame part around the mesh part, and (3) laminating a near infrared ray shielding film (5) to the face of the mesh part of the metal mesh layer (11) by a second transparent adhesive layer (4B), and filling the surface irregularities of the first adhesive layer (14) exposed at the openings of the mesh part with the second adhesive layer (4B) to make the exposed roughened surface of the first adhesive layer (14) transparent [0039-0122].

5. With regard to claim 4, in figures 1 and 5, Masahito discloses a display front panel (10) comprising: a transparent substrate (13), a metal mesh layer (11) laminated to at least one surface of the transparent substrate (13) by a first transparent adhesive layer (14), and a near infrared ray shielding film (5) laminated to a surface of the metal mesh layer (11) by a second transparent adhesive layer (4B), the metal mesh layer (11) having a mesh part with a plurality of openings (M, figure 5), the second adhesive layer filling (4B) surface irregularities of the first adhesive layer (14) exposed at the openings of the mesh part to make the exposed roughened surface of the first adhesive layer (14) transparent. [0039-0077].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masahito as applied to claims 1 and 4 above, in view of itself.

8. With regard to claim 2, in figures 1, 3 and 5, Masahito discloses that both the laminating of the metal layer (11) to the transparent substrate (13) and the laminating of the near infrared ray shielding film (5) to the metal layer (11) are conducted by dry laminating. Masahito does not expressly disclose that continuous films are laminated by a winding-up loading and unloading system.

9. One having ordinary skill in the art would understand that it is common to produce these types of laminates through a dry laminating process using laminating systems wherein continuous films are laminated by a winding-up loading and unloading system.

10. Therefore, at the time of invention, it would have been an obvious choice for a person having ordinary skill in the art to construct the Masahito with laminating systems wherein continuous films are laminated by a winding-up loading and unloading system, so that the laminates could be produced quickly and efficiently.

11. With regard to claim 3, all of the limitations are disclosed by Masahito, as discussed in the rejections of claims 1 and 2 above. However, Masahito does not expressly disclose that at least one edge section of the frame part of the metal layer is exposed by making a width of the near infrared ray shielding film smaller than that of the metal layer in the laminate film, wherein the width refers to a size in a direction perpendicular to a direction in which the near infrared ray shielding film and the laminate film containing the metal layer run.

12. Masahito teaches an acid resisting film (3) having a width smaller than the width of the metal layer (11) to electrical communication between components [0061].

13. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the Masahito display front panel where at least one edge section of the frame part of the metal layer is exposed by making a width of the near infrared ray shielding film smaller than that of the metal layer in the laminate film, wherein the width refers to a size in a direction perpendicular to a direction in which the near infrared ray shielding film and the laminate film containing the metal layer run. As taught by Masahito, when specific layers are made with a smaller width, the electrical communication between components may be improved resulting in a more effective display front panel.

14. With regard to claim 5, Masahito discloses all of the limitations, as discussed in the rejection of claim 4 above; however, it does not disclose that at least one edge section of the frame part is exposed without being covered with the near infrared ray shielding film. Masahito teaches an acid resisting film (3) having a width smaller than the width of the metal layer (11) to electrical communication between components [0061].

15. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the Masahito display front panel where the width of the near infrared ray shielding film was smaller than the width of the metal layer, so that a frame part around the mesh part is configured such that at least one edge section of the frame part is exposed without being covered with the near infrared ray shielding film. As taught by Masahito, when specific layers are made with a smaller width, the electrical

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communication between components may be improved resulting in a more effective display front panel.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Hollweg whose telephone number is (571) 270-1739. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm E.S.T..

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TH/

/Nimeshkumar Patel/
Supervisory Patent Examiner, Art Unit 2879